

CLAIMS:

1. A device for controlling a gas discharge lamp (10) with
- a current supply device (24) for supplying the lamp (10) with an alternating current (I_L) of given amplitude,
 - and a programming unit (μC) for providing amplitude values to the current supply device
- 5 (24) during a run-up phase (B1),
- wherein the run-up phase comprises at least the interval from 1 s after ignition of the lamp (10) to 3 s after ignition of the lamp (10), and
 - wherein the programming unit (μC) effectuates a substantially rising gradient in time of the current (I_L) during the run-up phase (B1).

10

2. A device as claimed in claim 1, wherein the time gradient is chosen such that the luminous flux (L) generated by the lamp (10) achieves at least at two given moments assigned minimum values.

- 15 3. A device as claimed in claim 1 or 2, wherein the run-up phase (B1) comprises at least the interval from 0.5 s after ignition of the lamp (10) to 4 s after ignition of the lamp (10).

4. A device as claimed in any one of the preceding claims, wherein the current
- 20 (I_L) rises by at least 30% in the run-up phase (B1) with respect to the value at the start of said phase.

5. A device as claimed in any one of the preceding claims, wherein the time gradient of the current (I_L) in the run-up phase (B1) rises monotonically averaged over time.

25

6. A device as claimed in any one of the preceding claims, wherein the current (I_L) is an alternating current with a substantially square-wave characteristic in time and a frequency of at least 200 Hz.

7. A device as claimed in any one of the preceding claims, wherein the current (I_L) drops to a stationary value in a transition phase (B2) following the run-up phase (B1).

8. A device as claimed in any one of the preceding claims, wherein the current (I_L) at the start of the run-up phase (B1) amounts to at most 75%, preferably less than 60% of the maximum value that the current assumes in the interval after 1 s after ignition.

9. A lighting system with

- a gas discharge lamp (10)
- and a control device (22) as claimed in any one of the claims 1 to 8.

10. A lighting system as claimed in claim 9, wherein the gas discharge lamp (10) has a filling free from Hg.

11. A method of controlling a gas discharge lamp wherein

- an alternating current (I_L) flows through the lamp in a run-up phase (B1) which comprises at least the interval from 1 s after ignition of a lamp (10) to 3 s after ignition of the lamp (10),
- wherein the current (I_L) is controlled such that its amplitude rises during said run-up phase, and
- wherein the time gradient of the current (I_L) is chosen such that the luminous flux (L) generated by the lamp (10) achieves at at least to two given moments in time (B1) assigned minimum values.